

I claim:

1. An angling coupler comprising:

A. a first end connectable to a first prosthetic component and having:

i. a first end longitudinal axis; and

5 ii. a first end base with a first end surface;

B. a second end connectable to a second prosthetic component and having:

i. a second end longitudinal axis; and

ii. a second end base with a second end surface adapted to be

matingly connected to said first end surface; and

10 C. a connector defining a fixed axis of rotation for adjustably and rigidly connecting said first end and said second end such that said first end longitudinal axis is in a selected angular alignment with respect to said second end longitudinal axis and said first end is angularly adjustable with respect to said second end about said fixed axis or rotation.

15 2. The angled coupler of Claim 1 wherein:

A. said first end comprises a collar; and

B. said first prosthetic component comprises a pylon.

3. The angled coupler of Claim 1 wherein:

A. said second end comprises a receiver; and

20 B. said second prosthetic component comprises a pyramidal adapter.

4. The angled coupler of Claim 1 wherein:

A. said first end surface is concave; and

B. said second end surface is convex.

5. The angled coupler of Claim 4 wherein said first end surface and said second end surface are serrated.

6. The angled coupler of Claim 4 wherein:

A. said first end has a first end hole through said first end base in a direction
5 generally parallel to said first end longitudinal axis;

B. said second end has:
i. a slot through said second end base in a plane generally parallel to
said second end longitudinal axis; and

ii. a second end hole through said second end base in a direction
10 generally perpendicular to said longitudinal axis; and

C. said connector comprises:

i. a pin for being received in said second end hole, for defining said
fixed axis of rotation, and having a connector pin hole; and

ii. a fastener for being inserted through said first end hole and said
15 slot and into said pin,

wherein said connector connects said first end to said second end in a selected
angular alignment about said fixed axis of rotation.

7. The angled coupler of Claim 6 wherein said slot limits a range of said selected
angular alignment about said fixed axis of rotation.

20 8. The angled coupler of Claim 7 wherein said range of said selected angular
alignment about said fixed axis of rotation is approximately 50 degrees.

9. An angled coupler comprising:

A. a first end adapted to receive a first prosthetic component and comprising:

- i. a first end longitudinal axis; and
 - ii. first end base having:
 - a. a concave surface; and
 - b. a first end hole through said concave surface generally parallel to said first end longitudinal axis;
- 5
- B. a second end adapted to receive a second prosthetic component and comprising:
- i. a second end longitudinal axis; and
 - ii. a second end base having:
 - 10 a. a second end hole through said second base in a direction generally perpendicular to said second end longitudinal axis;
 - b. a concave surface; and
 - c. a slot lying in a plane generally parallel to said second end longitudinal axis;
- 15
- C. a pin for being received in said hole through said second base; and
- D. a fastener for being inserted through said first end hole and said slot, and into said pin to hold said concave surface of said first end in mating engagement with said convex surface of said second end,
- wherein said first longitudinal axis is in a selected angular alignment with respect
- 20 to said second longitudinal axis.

10. The angled coupler of Claim 9 wherein:

- A. said first end comprises a collar; and
- B. said first prosthetic component comprises a pylon.

11. The angled coupler of Claim 9 wherein:
- A. said second end comprises a receiver; and
 - B. said second prosthetic component comprises a pyramidal adapter for being received within said receiver.
- 5 12. The angled coupler of Claim 9 wherein said fastener is a bolt for being turned into said pin.
13. The angled coupler of Claim 9 wherein said selected angular alignment is adjustable within a range of approximately 50 degrees.
14. The angled coupler of Claim 9 wherein said concave surface of said first end base
10 and said convex surface of said second end base are serrated.
15. The angled coupler of Claim 14 wherein said serrated concave surface of said first end base and said serrated convex surface of said second end base hold said first end in incremental mating engagement with said second end.
16. The angled coupler of Claim 15 wherein said serrated concave surface of said first
15 end base and said serrated convex surface of said second end base hold said first end in incremental mating engagement with said second end in approximately 2.5 degree increments.
17. In combination:
- A. a pylon having a first end and a longitudinal axis;
 - 20 B. a pyramidal adapter; and
 - C. an angularly adjustable coupling assembly comprising:
 - i. a first end with:

a. a collared clamp for being removeably connected to said first end of said pylon; and

b. a first end base; and

ii. a second end with:

5 a. a receiver for being removeably connected to said pyramidal adapter; and

b. a second end base angularly adjustably connected to said first end base about a fixed axis of rotation.

18. The combination of Claim 17 wherein:

10 A. said first end comprises a concave surface; and

B. said second end comprises a convex surface adapted to be in mating engagement with said concave surface of said first end.

19. The combination of Claim 18 wherein said concave surface and said convex surface are serrated.

15 20. The combination of Claim 18 wherein:

A. said second end has a second end hole therethrough and a slot therethrough that is generally perpendicular to said second end hole;

B. said first end has a first end hole therethrough; and

C. said angularly adjustable coupling assembly further comprises:

20 i. a pin having a side hole and for being received within said second end hole; and

ii. a fastener for being inserted through said first end hole and said slot, and into said pin side hole to hold said first end and said second end in a selected angular alignment with respect to each other.

21. A method of assembling a prosthetic limb comprising the steps of:

5 A. providing a socket having a socket central axis and a socket end;

B. providing an adapter having an adapter central axis and being connectable to the socket end;

C. connecting the adapter to the socket end wherein the adapter central axis is offset from the socket central axis by a first angle lying in a plane defined by the adapter central axis and the socket central axis;

D. providing a coupler having a first end with a first end longitudinal axis and a second end with a second end longitudinal axis, wherein the first end is angularly adjustable with respect to the second end about a fixed axis of rotation;

E. rotating the first end of the coupler with respect to the second end of the coupler about the fixed axis of rotation until the first end longitudinal axis is generally offset from the second end longitudinal axis by a second angle, wherein the second angle is substantially equal to the first angle; and

F. connecting the second end of the coupler to the adapter wherein the fixed axis of rotation is generally perpendicular to the plane defined by the adapter central axis and the socket central axis so that the first end longitudinal axis is generally parallel to the socket central axis.

22. The method of Claim 21 comprising further the step of providing a coupler with a first end having a concave surface and a second end having a complimentary convex surface.